HHS Public Access

Author manuscript

J Behav Health Serv Res. Author manuscript; available in PMC 2018 December 11.

Published in final edited form as:

J Behav Health Serv Res. 2018 April ; 45(2): 237–251. doi:10.1007/s11414-017-9578-3.

Race/Ethnicity, and Behavioral Health Status: First Arrest and Outcomes in a Large Sample of Juvenile Offenders

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Abstract

The objective of this study was to assess the simultaneous effects of gender, race/ethnicity, and pre-arrest behavioral health (BH) service-use on age at first arrest, and first arrest outcomes. Between January 2004 and December 2011, arrest and medical records were collected on a retrospective longitudinal cohort of 12,476 first-time offenders, ages 8–18 years. Black youth were arrested at younger ages than white or Hispanic youth. Youth with psychiatric problems were arrested at younger ages than youth with substance-use, dual-diagnoses, or no BH problems. Compared to white males, black males had lower odds of detention and BH referrals. Compared to white females, black females had higher odds of release and lower odds of probation, detention, and BH referrals. A significant gender-by-BH problem interaction revealed males and females with previous psychiatric problems were arrested at younger ages than youth with substance, dual-diagnosis, or no prior problems. Implications are discussed.

In the United States (U.S.), approximately 16–27% of youth have been arrested for a non-traffic offense by the age of 18.[1, 2] Of those arrested, 30% are black males, 26% Hispanic males, and 22% white males.[3] It is no surprise that the juvenile offender population is disproportionately represented by young black males, which has been consistently shown in prior studies and national U.S. data.[4] The observed disparities may be the result of discrimination at each decision-making stage of the juvenile justice process, and/or may be

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

attributed to actual behavioral differences in severity of offending.[5] The research clarifying the role of race and charge severity, thus far, is mixed.[6]

Another disparity observed in the juvenile offender population is that a large proportion of the youth present with behavioral health (BH) problems (i.e., psychiatric, substance-use, or both).[7] When BH is broadly lumped to include both problems with mental health and substance use, juvenile offenders with BH problems do not appear to be at greater risk for rearrest; however, they are arrested at younger ages than youth without BH problems.[8] When substance abuse and mental health problems are examined separately, juveniles with substance use disorders with or without co-occurring disorders appear to be at greater risk for continued offending and escalation of serious offending.[9] Further, the continued involvement in the justice system by youth with BH problems may be due to the fact that they are not likely to receive services whether they are in a residential setting or in the community for their BH problems.[10]

The majority of prior studies has focused on serious juvenile offenders or youth who have already had contact or been involved in the juvenile justice system.[7, 11] It is unclear how gender, race/ethnicity, and BH problems interact to impact the timing of a youth's first arrest and the severity of outcomes at first arrest (e.g., release, probation, detention). The current study attempts to examine this pattern by studying a large retrospective sample of juvenile offenders at their first arrest with accompanying information about their BH status from medical service use records prior to their first arrest.

Race/Ethnicity, Gender, Behavioral Health, and Juvenile Justice Involvement

Results are mixed when considering the role that race/ethnicity plays in justice system decision-making. The majority of studies have relied on samples of youth who have already been involved in the justice system, rarely studying decision-making related to a youth's first arrest. Studies of youth with prior involvement have typically found that, although minority youth (black, Hispanic, and American Indian) are arrested at higher rates, and adjudicated delinquent more often than white youth, white youth receive more severe consequences, such as formal processing, detention at pre adjudication, and incarceration.[12–14] Other studies have found that, compared to black youth, white youth were more likely to be referred to diversion at intake (i.e., were less likely to be formally processed through the criminal justice system).[15]

Studies of the role of gender in justice system decision-making are similarly complex. Young white females are typically treated less harshly by the system than young minority females and males.[16–18] However, as crime severity and number of prior arrests increase, young white females may receive harsher outcomes than black females.[18]

A disproportionate number of juvenile offenders have BH problems,[19] and youth with BH problems have increased rates of recidivism.[9, 20, 21] Some studies of juvenile offenders report more BH problems among white youth than minority youth,[22] while others find that minority youth suffer higher rates of BH problems.[23, 24] However, research consistently

shows that, compared to white youth, minority youth are less likely to receive BH service referrals or BH services.[23–25] Female juvenile offenders, compared to males, frequently exhibit more severe and complex BH problems[7, 26] and are more likely to seek BH treatment, receive referrals to treatment, and use services.[23, 27, 28]

Summary

The present study sought to clarify the effects (and interactions) of race/ethnicity, gender, and pre-arrest BH service-use on age at first arrest and first arrest outcomes. Although previous studies have assessed these factors among juvenile offenders,[15, 29, 30] few studies explicitly explored these factors at the time of first arrest.

Methods

Participants

A retrospective cohort study was conducted among youth arrested between ages 8–18 years in Marion County, Indiana (Indianapolis metropolitan area) between January 1, 2004 and December 31, 2011. Electronic data were extracted from the Marion County Juvenile Justice System (MCJJS) and the Indiana Network for Patient Care (INPC). Institutional Review Board approval was granted by Indiana University-Purdue University Indianapolis and by relevant review boards of the collaborating agencies.

Electronic criminal records were extracted from the MCJJS for 30,535 youth from 2004 to 2011, 20,658 of whom were identified as first-time offenders. Among first-time offenders, 16,337 were matched to INPC medical records from the same period. Information on gender for 22 youth was missing, and these youths were removed from the dataset. Of the 16,315 youth, the INPC contained information on the Medicaid insurance coverage for 12,476 (76.5%) youth but no insurance information for 3839 (25.5%) youth. For the 12,476 youth with Medicaid information, 10,996 (88.1%) had Medicaid coverage before or at the time of their first arrest, and 1480 (11.9%) were not covered before first arrest. A series of chi-square analyses was conducted to determine whether the demographic characteristics of the 12,476 youth with Medicaid coverage were significantly different from the 3839 youth without insurance information. Specifically, the youth without insurance coverage information, compared to the Medicaid group, was composed of more males, fewer females, more white and Hispanic youth, fewer black and other youth, fewer 8–14 year-olds, and more 17–18 year olds (all $ps < .05$). Due to significant differences between these groups, and to the lack of access to behavioral health information for the group of youth without insurance coverage, it was decided to restrict the sample to only youth with Medicaid coverage information.

The final sample consisted of 12,476 first-time offenders (59% male, 41% female) ages 8–18 years ($M = 15.00$, $SD = 1.92$) at first arrest. The racial/ethnic composition of the sample was 33.3% white, 56.8% black, 5.3% Hispanic, and 4.6% “other,” which included youth who identified as American Indian/Alaskan, Asian, Native Hawaiian, and multiracial.

Measures

Demographics—Gender, age at first arrest, and self-reported race/ethnicity were collected from criminal records.

Offense type—The most serious offense associated with a youth's first arrest was included in the analyses. Seriousness of offense was determined by its category (e.g., felony, misdemeanor, infraction, status) and class (A, B, C, D, with A being the most serious). Offenses were coded according to the classification system used by the Uniform Crime Reporting Statistics of the U.S.[31] Offense type was coded as (1) status offenses (e.g., runaway, curfew violation), (2) disorderly conduct, (3) drug offenses (e.g., dealing, possession), (4) property offenses (e.g., theft, destruction of property), (5) violent offenses (e.g., rape, murder, assault, possession of dangerous weapon), and (6) other (e.g., obstructing emergency medical personnel, unlawful gambling).

First arrest outcomes—Youth could experience several outcomes associated with their arrest. In this study, the first outcome occurred at intake when the youth could either be released (1) or held (0) for further processing. The other outcomes examined in this study occurred at the case disposition stage and included probation, detention, and court ordered BH referrals (e.g., psychiatric services, substance use treatment, sexual offender therapy). Outcomes were coded yes (1) or no (0).

Pre-arrest BH service-use—BH service-use before first arrest was collected from Medicaid claims records. Psychiatric and substance-use diagnoses were identified using Clinical Classifications Software (CCS).[32] This software tool categorizes International Classification of Diseases, 9th Revision, codes into 259 unique diagnoses and 331 procedures, including the clinical classifications for BH service-use. BH diagnoses identified through service-use records included, but were not limited to, attention-deficit hyperactivity disorder, conduct disorder, bipolar disorder, schizophrenia, and substance abuse. Pre-arrest BH service-use was coded as none, psychiatric, substance-use, or dual-diagnoses.

Analyses

To assess the effects of gender, race/ethnicity, and pre-arrest BH service-use on age at first arrest, the distributions of age at first arrest by gender, race/ethnicity, and BH service-use were depicted graphically. General linear regression modeling was performed to formally test the effects of these factors on age at first arrest. Herein, linear regression analysis was used instead of survival analysis because all youth in this study cohort had been arrested (at least once) during the observational period, so there were no censored outcomes. Gender, race/ethnicity, and BH service-use were entered as predictors in the general linear model, and Medicaid coverage was entered as the covariant to control for its possible influence on BH service-use.

Analyses investigating race/ethnicity and BH service-use on first arrest outcomes were conducted separately for males and females, as gender has been associated with differential outcomes among antisocial youth.[20, 21, 33, 34] Four separate logistic regression models were conducted to assess the effects of these factors on specific arrest outcomes (i.e., release,

probation, detention, BH referrals); in these analyses, age at first arrest and offense types (referent violent offenses) were included as covariates. Further, it should be noted that the first arrest outcomes are not mutually exclusive, due to how the outcome variables were coded for the logistic regression analyses. Thus, it is possible that an individual who is placed on formal probation, also received a BH referral. The interactions of race/ethnicity and BH service-use on arrest outcomes were not examined due to the constraint of sample sizes. All analyses were performed using SPSS version 22. *P* values less than 0.05 were considered statistically significant.

Results

Table 1 presents the sample characteristics by gender and race/ethnicity. More males were arrested than females, and more black youth were arrested than white, Hispanic, and other youth. The majority of youth had no BH service-use (68.8%), followed by psychiatric (28.5%), dual-diagnoses (1.7%), and substance-use (0.9%) service-use. The total number of unique psychiatric diagnoses per youth ranged from 0 to 10 ($M = 0.59$, $SD = 1.19$), and the total number of substance-use diagnoses per youth ranged from 0 to 3 ($M = 0.03$, $SD = 0.19$). More than a third of offenses were violent (37.5%), followed by property (33.3%), disorderly conduct (11.6%), drugs (8.1%), other offenses (7.6%), and status offenses (1.9%). The majority of youth were released (90%), with only a small proportion receiving probation (7.0%), detention (6.5%), or BH service referrals (2.4%).

Developmental pattern of arrest

Figure 1 shows the frequency of first arrests occurring from ages 8–18 years by gender (a), race/ethnicity (b), and BH service-use (c). First arrest frequency increases beginning at age 12, peaks between 15 and 16 years, and decreases by age 17.

Age at first arrest

The results of the general linear regression analysis indicated that evaluation of the assumptions of normality of sampling distributions, linearity, homogeneity of variance, homogeneity of regression, and reliability of covariates were satisfactory. There were no outliers. The result of the linear regression model was not significantly different than a model in which the Medicaid coverage covariate was excluded. Thus, the simpler general linear regression model is reported.

Table 2 shows the mean ages at first arrest by gender, race/ethnicity, and BH services. The general linear model showed no main effect for gender, $F(1, 12{,}444) = 0.17$, $p = .680$. There was a main effect for race/ethnicity, $F(3, 12{,}444) = 3.71$, $p = .011$. Post hoc analyses suggest that black youth were younger than white or Hispanic youth, and other youth were younger than white or Hispanic youth (all $ps < .05$). There was also a main effect for BH services, $F(3, 12{,}444) = 21.38$, $p < .001$. Scheffé's post hoc analyses suggest that youth with no service-use were older at first arrest than youth with psychiatric service-use, and younger than those with BH service-use for substance-use or dual-diagnoses (see Table 2). Youth with psychiatric service-use were younger than those with substance-use, or dual-diagnoses (all $ps < .001$). Further, there was a significant gender by BH service interaction, $F(3,$

12,444) = 4.09, $p = .007$ (see Fig. 1d). Simple effects analyses indicated that the means for the four BH service groups were significantly different for both males, $F(3, 12,444) = 99.04$, $p < .01$, and females, $F(3, 12,444) = 20.07$, $p < .01$ (see Table 2). Post hocs revealed males with psychiatric service-use were younger than males with no service-use, substance-use service-use, and dual-diagnoses service-use. Males with BH service-use for substance-use or dual-diagnoses were older than males with no service-use. Among females, those with psychiatric service-use were younger than those without service-use, or BH service-use for substance-use, or dual-diagnoses. Females with dual-diagnoses were older than females with no service-use (see Fig. 1d). No significant interactions for gender by race/ethnicity, $F(3, 12,444) = 0.13$, $p = .941$, BH services by race/ethnicity, $F(9, 12,444) = 0.70$, $p = .712$, or gender by BH services by race/ethnicity, $F(9, 12,444) = 0.92$, $p = .507$, emerged.

Outcomes associated with first arrest

Males—Results of the logistic regressions for males are shown in Table 3, model 1. Across males, increasing age of arrest was associated with increased odds of probation, and decreased odds of detention. Among males, compared to violent offenses, all other offense types had increased odds of release, and decreased odds of probation, and detention. With the exception of status offenses, all other offenses had decreased odds of BH referrals. Black males had decreased odds of detention and BH referrals. Males with psychiatric service-use had increased odds of release, and decreased odds of probation, and detention. Males with dual-diagnoses service-use had decreased odds of detention.

Females—Across females, increasing age of first arrest was associated with increased odds of release, and decreased odds of probation, detention and BH referrals. When compared to youth with violent offenses, youth with status offenses have increased odds of release, and decreased odds of detention. Disorderly conduct had increased odds of release, and decreased odds of probation, and detention. Property offenses have increased odds of release, and decreased odds of probation, detention, and BH referrals. The results of the logistic regressions for females are shown in Table 3, model 2. Black females had increased odds of release, and decreased odds of probation, detention and BH referrals, compared to white females. Females who identified as other, or Hispanic, also had decreased odds of detention, compared to white females. For BH services, compared to females with no service-use, females with substance-use service-use had increased odds of probation and BH referrals.

Discussion

We found a pattern of juvenile arrest rates from ages 8–18 that are consistent with the developmental pathway of antisocial behavior (e.g., truancy, deception, theft, destruction of property, substance use, harm or injury to people or animals)[34] and self-reported rates of arrest from a national sample of U.S. youth.[1] The majority of arrests began around age 12, peaked between ages 15–16, and declined after age 17. Consistent with prior research, black and other youth, and youth who used BH services for psychiatric problems were arrested at significantly younger ages than white and Hispanic youth, and youth with no BH service-use.[8] After controlling for the effects of race/ethnicity and BH service status, males and

females did not significantly differ in age at first arrest. However, a gender difference appeared when examining the data by BH service-use. There were gender differences in arrest age among youth with substance-use problems, including those youth with dual-diagnoses. Males with substance-use problems or dual-diagnoses were arrested at older ages than those without BH problems, while females with substance-use problems only (not dual diagnoses) were arrested at older ages than those without BH problems. The older age at arrest associated with substance-use observed in the present study follows national trends in adolescent drug use. According to the 2013 U.S. National Survey on Drug Use and Health, the percentage of youth, ages 12–17, with substance-use disorders dropped from 8.9 to 5.2% between 2002 and 2013.[35] The rate of illicit drug use varied by age in 2013; 2.6% at 12–13, 7.8% at 14–15, 15.8% at 16–17, and the highest rate of 22.6% among 18–20-year-olds. Average initiation age of illicit drug use and alcohol use among 12–49 years-olds was 19.0 and 17.3, respectively. In a national sample of U.S. adolescents, ages 13–18, the median age of onset for substance use disorders was 15.[36] In the present study's sample, 2.6% of youth had used drugs and/ or alcohol to an extent that warranted a substance-use diagnosis prior to their first arrest, and 8.1% of youths were arrested for a drug offense. Given the average age of the sample was 15.0, the percentage of youth with substance diagnoses or drug offenses appears comparable to national rates.

Overall, at first arrest, males, black youth, and youth with BH problems disproportionately represented the sample. Youth involved with the mental health system comprised 30% of the sample, while they represent only 9–13% of the general population,[37] and the lifetime prevalence of BH disorders in U.S. Adolescents, ages 13–18, have been reported to be 22.2%.[36] Black youth represented 56.8% of our sample, yet represented only 32.7% of the Marion County population in Indiana from 2000 to 2010.[38] Consistent with a recent study on a nationally representative sample of youth,[39] black youth were arrested at greater rates than white youth, but there was no difference between Hispanic and white youth.

Contrary to expectations that racial/ethnic minority youth experience more severe sanctions, [40] the results generally showed no significant differences in outcomes of first arrest compared to white youth. In fact, racial/ethnic minority youth experienced more lenient outcomes; they were released more frequently, and received probation and detention less frequently than white youth. Prior studies hypothesized that disproportionate minority contact (DMC) results from the accumulation of more severe sanctions imposed on racial/ethnic minority youth at each decision stage of the justice system.[40] However, previous studies used samples of youth with histories of justice system involvement,[15, 30] possibly leading to mixed findings on race/ethnicity and justice outcomes. The more lenient treatment of black youth observed in the present study (especially black females) may be due to a combination of effects. For example, females, regardless of race, are typically treated more leniently than males in the justice system.[16] Also, "correction bias," may influence decision-makers to compensate for racial discrimination by others in the system (e.g., more lenient sentencing for black youth may be an attempt to compensate for higher rates of arrests and false arrests of minority youth by police officers).[14] Consistent with prior research,[23] black males and females were less likely than their white counterparts to be referred for BH services. The lower likelihood of being referred for BH services among Black youth may be a function of racial bias, where they consistently are treated more severely in juvenile court

outcomes than their white counterparts.[14] The racial bias may be driven by such factors as viewing the antisocial behaviors of black youth as not a consequence of BH problems, as well as, viewing white youth as being more amenable to treatment.[41] Further, although minority youth in the juvenile justice system, especially Black youth, demonstrate the greatest level of mental health needs, they are the most at-risk group to not receive help for their mental health needs.[24]

Although at greater risk of entering the system at younger ages, males with psychiatric problems received more lenient outcomes at intake and case disposition, compared to males with no history of BH service-use. Males with dual-diagnoses were also less likely to be placed on probation. For females, substance-use problems increased the odds of probation and receiving BH service referrals. The higher rate of referrals among females supports research that finds females tend to receive referrals more than males.[23, 28] Further, this may only have been true for substance-use because it is a more readily detectable behavior, as opposed to internalizing symptoms that are more commonly experienced by females.[42] Discouragingly, in the present study, pre-arrest BH service-use did not predict receiving a BH service referral. In fact, only 2.4% of the sample was referred to BH services. Among youth with pre-arrest BH service-use, 3.0% received a BH service referral. There are several ways to interpret this finding. One possible reason for the low BH service use and BH referrals, may be the lack of Medicaid providers or limited access to services. Another reason may be that, a referral rate of 3% could identify a potential lack of communication between the juvenile justice and mental health systems in assessing the BH service needs of youth who are arrested given that roughly 30% received BH services in the year prior to arrest. Conversely, the *lack* of referral may be consistent with juvenile justice practitioners fear of “netwidening”.[43] Net-widening is the often unintended consequence of involving more youth in the juvenile justice system through prevention and intervention efforts. Involving more youth in the justice system is negative given that processing youth through formal juvenile court systems is associated with future criminal behavior.[44] This may be particularly relevant as the current study examines youth at first arrest when consideration of diverting youth from further sanctions is an important decision that could influence the probability of the youth’s future involvement in the system.[45]

Limitations

The data of the present study were restricted only to youth with Medicaid, which does not represent all youth who enter the juvenile justice system. However, among the total collected sample of 20,658 first-time offenders, 60.4% had Medicaid, 18.6% no insurance, and 21% of youth had no medical records in the data available, possibly because they had private insurance. These numbers closely match those of a study on detained urban youth in which 66% of youth were covered by Medicaid, 18% by private insurance and 17% had no insurance.[46] No extralegal information was available, such as family and neighborhood environment and socioeconomic status, factors often confounded with race/ethnic minority status that may influence decisions made by those in the justice system. The data was also limited because it includes only youth who were arrested in Marion County, an urban center of Indiana, and may not be representative of youth in the state. Further, the characteristics of the sample may not be representative of youth involved in the juvenile justice system at the

national level, and therefore the generalizability of the results are limited. Despite these limitations, this study has several strengths. The sample was a large retrospective longitudinal cohort of youth who had no prior involvement in the justice system, while previous studies have included youth with more varied criminal histories. The BH service-use of youth before their first referral to the justice system were identified through medical records, and allowed for the examination of the influence of BH status on first arrest. The study had a large sample of females, and allowed for the separate analyses of first arrest outcomes for males and females. The majority of previous studies have only used samples of males, not allowing for the examination of females.

Conclusions

There are immediate and long-term negative consequences (e.g., lower educational attainment, adult convictions, violent death) for youth who have contact with the justice system, and the severity of the consequences increases with deeper involvement.[47, 48] The study demonstrates, once again, the clear race/ethnic disparity that occurs at the point of arrest. However, race/ethnic disparity at the point of case disposition after first arrest was not found. Regardless of sanction severity at first arrest, the disproportionalities observed in the juvenile justice population begin at the early stage of arrest. Black youth and youth with BH problems are at a significant disadvantage and are at risk for poorer life outcomes as they enter the justice system in greater numbers, and at more vulnerable ages.[47, 48] This disparity is made larger by the finding that Black youth are the least likely to receive BH referrals. Suggesting that Black youth and youth with BH problems are unlikely to be detected or addressed in the system. Future research should investigate what mechanisms are driving the poor rate or BH referrals.

Implications for Behavioral Health

These results of the study highlight two broad recommendations. First, it suggests that improvements are needed in the identification of youth with BH needs, either among frontline personnel such as police officers, or through use of BH assessment measures at system intake. For example, if all youth brought in for intake are given a standardized BH assessment screener, such as the Massachusetts Youth Screening Instrument-2,[49] and they score in the borderline and/or clinical range of any of the scales on the measure, the youth should be given a BH referral for further assessment and services. A follow-up should be conducted with the youth to determine if they received services, and if not, what were the barriers to receiving services, and how could we address these barriers to make sure they can receive services. Second, diversion programs can be quite effective in limiting future criminal behavior with youth at first arrest who have less severe charges.[45] Diversion programs are particularly important at the earliest points in the criminal justice system, such as first arrest. Thus, juvenile justice systems are encouraged to establish formal diversion programs the earliest point of criminal justice involvement.

Acknowledgements

This study was funded by grants from HRSA/MCHB R40MC08721, provided through the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Research Program as well as the Agency for Healthcare Research and Quality (R01HS024296; R01HS023318).

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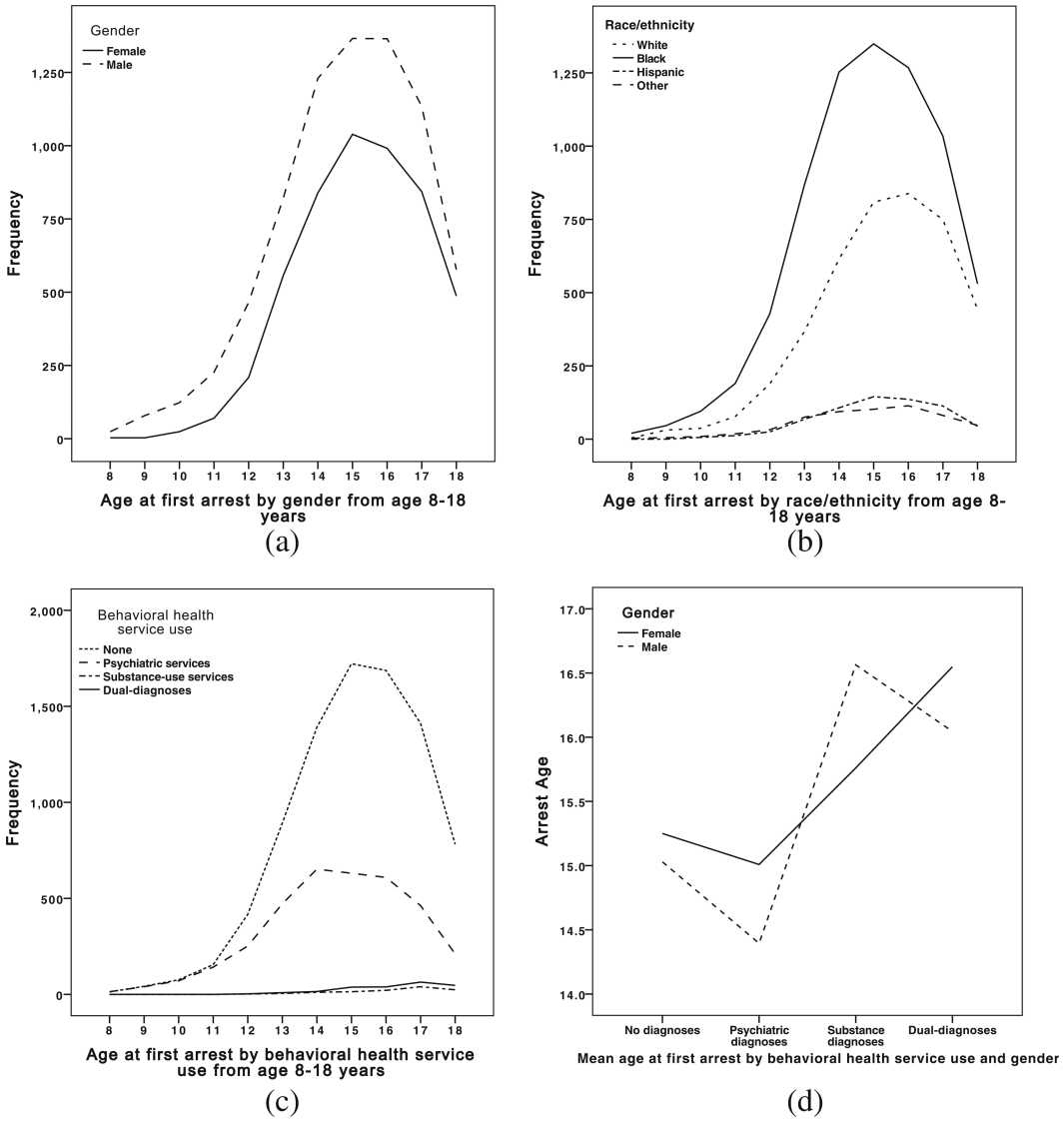

Figure 1.

Age at first arrest by gender, race/ethnicity, and behavioral health service-use

J Behav Health Serv Res. Author manuscript; available in PMC 2018 December 11.

Table 1

Sample characteristics by gender and race/ethnicity

	Total (*N* = 12,476)	Male (*n* = 7411)				Female (*n* = 5065)			
		White (*n* = 2466)	Black (*n* = 4161)	Hispanic (*n* = 431)	Other (*n* = 353)	White (*n* = 1693)	Black (*n* = 2920)	Hispanic (*n* = 225)	Other (*n* = 227)
Youth (%)	100	19.8	33.4	3.5	2.8	13.6	23.4	1.8	1.8
BH service (%)									
None	68.8	55.9	69.4	77.5	56.7	68.2	78.6	84.4	65.2
Psychiatric	28.5	39.1	29.3	20.2	38.5	26.5	20.4	14.2	32.2
Substance-use	0.9	1.8	0.3	1.9	1.4	1.8	0.4	0.9	0.9
Dual-diagnoses	1.7	3.2	0.9	0.5	3.4	3.6	0.5	0.4	1.8
Offense type (%)									
Status	1.9	2.3	1.1	2.6	1.4	4.7	1.1	4.4	1.3
DC	11.6	6.7	10.1	5.8	8.8	9.8	20.1	8	14.5
Drag	8.1	14.8	7.8	13.2	12.5	8.3	1.9	6.2	4.8
Property	33.3	27.9	32.7	36.4	30.3	42.2	32.6	36.9	38.3
Violent	37.5	37.8	40	26.2	36.3	29.5	40.5	32.9	36.1
Other	7.6	10.5	8.3	15.8	10.8	5.4	3.9	11.6	4.8
Arrest outcomes (%)[a]									
Release	90	86.7	87	89.6	85.8	91.1	94.4	94.2	93.4
Probation	7	9.4	9.1	7.2	9.3	5.3	3.1	4	4
Detention	6.5	8.1	7.1	6.5	7.4	7.2	4.2	3.6	4
BH referrals	2.4	4.3	2.3	2.1	3.7	2.5	0.9	1.3	0.9

BH, behavioral health; DC, disorderly conduct

[a]Some percentages will exceed 100 due to the multiple outcomes participants can experience

Table 2

Mean age of arrest by gender, race/ethnicity, and behavioral health service use

	Mean (*SD*) age of arrest				
	Total	**No service**	**Psychiatric service**	**Substance service**	**Dual-diagnoses service**
Males	(*n* = 7411)	(*n* = 8588)	(*n* = 3556)	(*n* = 117)	(*n* = 215)
White	15.05 (2.01)	15.17 (1.93)	14.71 (2.10)	16.57 (1.40)	16.29 (1.43)
Black	14.73 (2.04)	14.95 (1.96)	14.14 (2.12)	16.50 (1.35)	15.67 (1.71)
Hispanic	15.13 (1.75)	15.22 (1.69)	14.64 (1.86)	16.63 (1.19)	16.50 (2.12)
Other	14.68 (2.13)	14.84 (1.99)	14.29 (2.30)	16.60 (0.55)	15.58 (1.62)
Mean (SD) age of arrest	14.86 (2.02)	15.03 (1.94)	14.39 (2.13)	16.56 (1.31)	16.05 (1.55)
Females	(*n* = 5065)	(*n* = 3788)	(*n* = 1149)	(*n* = 46)	(*n* = 82)
White	15.54 (1.65)	15.57 (1.66)	15.29 (1.63)	15.97 (1.54)	16.59 (1.31)
Black	15.05 (1.77)	15.10 (1.75)	14.83 (1.83)	15.50 (1.98)	16.38 (1.31)
Hispanic	15.18 (1.64)	15.16 (1.62)	15.16 (1.74)	15.50 (2.12)	18.00[a]
Other	15.10 (1.83)	15.27 (1.82)	14.71 (1.82)	14.50 (2.12)	16.25 (1.25)
Mean (SD) age of arrest	15.22 (1.75)	15.25 (1.73)	15.01 (1.76)	15.76 (1.68)	16.55 (1.30)

Means in last row for each section represent the means for each columns

SD standard deviation

[a]There is only one participant; therefore, a standard deviation is not available

Table 3

Multiple logistic regression analyses predicting arrest outcomes by gender

	First arrest outcomes							
	Release		**Probation**		**Detention**		**BH referral**	
Model 1: males	OR	95% Cl	OR	95% Cl	OR	95% Cl	OR	95% Cl
Age of arrest	0.97	0.93, 1.00	1.05 *	1.00, 1.09	0 92 ***	0.89, 0.97	0.95	0.89, 1.02
Offense category								
Status	6.65 ***	2.44, 18.15	0.11 **	0.03, 0.45	0.33 *	0.12, 0.89	0.15	0.02, 1.08
DC	4.63 ***	3.15, 6.81	O	0.10, 0.28	0.38 ***	0.25, 0.57	0.21 ***	0.10, 0.45
Drag	2 30 ***	1.77, 3.01	Q 41 ***	0.30, 0.57	0.61 **	0.44, 0.84	0.53 **	0.33, 0.84
Property	1.50 ***	1.28, 1.75	0 73 ***	0.61, 0.87	0.59 ***	0.48, 0.73	0.30 ***	0.21, 0.43
Other	2.69 ***	2.00, 3.61	0 32 ***	0.22, 0.47	0.48 ***	0.34, 0.69	0.18 ***	0.08, 0.38
Race/ethnicity								
Black	1.07	0.92, 1.25	0.92	0.77, 1.10	0.78 *	0.65, 0.95	0.51 ***	0.38, 0.69
Hispanic	1.30	0.93, 1.82	0.75	0.51, 1.11	0.76	0.50, 1.15	0.57	0.28, 1.14
Other	0.91	0.66, 1.26	1.01	0.69, 1.49	0.88	0.57, 1.35	0.87	0.48, 1.57
BH service-use								
Psychiatric	1.33 ***	1.14, 1.56	0.76 **	0.63, 0.91	0.57 ***	0.46, 0.70	1.07	0.80, 1.42
Substance-use	0.78	0.39, 1.56	1.52	0.71, 3.28	1.21	0.51, 2.86	1.53	0.46, 5.07
Dual-diagnoses	1.19	0.70, 2.04	0.83	0.44, 1.56	0.34 *	0.13, 0.94	0.45	0.11, 1.86
Model 2: females								
Age of arrest	1.11 **	1.04, 1.18	0.86 ***	0.79, 0.94	0.88 **	0.82, 0.95	0 79 ***	0.69, 0.90
Offense category								
Status	3.95 **	1.42, 11.01	0.36	0.11, 1.19	0.34 *	0.12, 0.94	0.00	0.00, -
DC	2.60 ***	1.76, 3.83	0.54 **	0.34, 0.86	0 40 ***	0.26, 0.61	1.16	0.61, 2.21
Drag	1.21	0.75, 1.97	0.60	0.30, 1.22	0.82	0.48, 1.40	1.12	0.45, 2.79
Property	2.60 ***	1.96, 3.45	0 47 ***	0.33, 0.67	0.31 ***	0.22, 0.43	0.50 *	0.26, 0.93
Other	0.98	0.63, 1.53	1.30	0.76, 2.24	1.41	.071, 1.84	1.47	0.60, 3.61
Race/ethnicity								

	First arrest outcomes							
	Release		**Probation**		**Detention**		**BH referral**	
Black	1.80***	1.41, 2.29	0.51***	.037, 0.70	0.49***	0.38, 0.65	0.30***	0.18, 0.51
Hispanic	1.77	0.98, 3.21	0.66	0.32, 1.33	0.40*	0.19, 0.83	0.51	0.16, 1.69
Other	1.48	0.85, 2.58	0.68	0.34, 1.38	0.48*	0.24, 0.97	0.30	0.07, 1.24
BH service-use								
Psychiatric	1.12	0.86, 1.47	0.83	0.58, 1.18	0.74	0.54, 1.02	1.33	0.78, 2.26
Substance-use	0.47	0.20, 1.09	3.69**	1.46, 9.32	1.74	0.65, 4.63	6.56**	2.05, 20.98
Dual-diagnoses	0.63	0.29, 1.36	1.43	0.50, 4.05	1.17	0.46, 3.00	3.26	0.94, 11.27

OR, odds ratio; Cl, confidence interval; DC, disorderly conduct; BH, behavioral health. Reference category for offense = violent, race/ethnicity = white, and behavioral health = none

*p<.05;

**p<.01;

***p<.001